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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/850,343	05/07/2001	Christopher R. Vincent	POU920000191US1	2305

23334 7590 07/21/2005

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EXAMINER

PHAN, TAM T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/850,343

Applicant(s)

VINCENT, CHRISTOPHER R.

Examiner

Tam (Jenny) Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This application has been examined. Amendment received on 04/25/2005 has been entered. Claims 1-2, 6, 8-10, 14, and 16-18 are currently amended. Claims 21-40 are cancelled.

2. Claims 1-20 are presented for examination.

### *Priority*

3. No priority claims have been made.

4. The effective filing date for the subject matter defined in the pending claims in this application is 05/07/2001.

### *Double Patenting*

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-31 of

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copending Application No. 09/850,390. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences between the two pending applications are minor wording, which do not change the scope of the invention. Refer to the below observation for obvious variations of limitation in claims 1-20 of the instant application and claims 1-31 of the pending application.

7. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant Instant 09/850,343	Pending Application 09/850,390
<p>1. A method for discovering resources in a network of user nodes, said method comprising the steps of: receiving, at a first user node of the network from one of the user nodes through a direct connection, a resource request to be published; determining whether to send the resource request to a publish-subscribe server node or to send the resource request to another of the user nodes; forwarding the resource request from the first user node to a second user node of the network, when it is determined to send the resource request to another of the user nodes; and sending the resource request from the first user node to the publish-subscribe server node for publication to a plurality of the user nodes of the network, when it is determined to send the resource request to the publish-subscribe server node.</p>	<p>1. A method for responding to a resource request from a requesting user node in a network of user nodes, said method comprising the steps of: receiving, via publication from a publish-subscribe server node, the resource request at a first user node of the network; receiving, from one of the user nodes through a direct connection, a response to the resource request at the first user node of the network; determining whether to send the response to the requesting user node or to send the response to another of the user nodes; forwarding the response to a second user node of the network, when it is determined to send the response to another of the nodes; and sending the response to the requesting user node, when it is determined to send the response to the requesting user node.</p>
<p>2. The method as defined in claim 1, wherein in the determining step, the determination of whether to send the resource request to the publish-subscribe server node or to send the resource request to another of the user nodes is a</p>	<p>2. The method as defined in claim 1, wherein in the determining step, the determination of whether to send the response to the requesting user node or to send the response to another of the user nodes is a random decision made by the</p>

<p>random decision made by the first user node.</p> <p>3. The method as defined in claim 2, wherein in the determining step, the random decision is made based on a weighting factor corresponding to the probability that the first user node will decide to send the resource request to the publish-subscribe server node.</p> <p>4. The method as defined in claim 1, wherein the forwarding step includes the sub-steps of: randomly selecting one of the user nodes to which the first user node is connected to be the second user node; and forwarding the resource request from the first user node to the second user node through a direct connection.</p> <p>5. The method as defined in claim 1, further comprising the step of sending, via publication from the publish-subscribe service node, the resource request to at least some of the user nodes of the network.</p> <p>6. The method as defined in claim 5, wherein in the step of sending via publication from the publish-subscribe server, the publish-subscribe server node sends the resource request to all of the user nodes of the network that are subscribed to one or more resource request channels.</p> <p>7. The method as defined in claim 1, further comprising the step of repeating the steps of determining and forwarding until in the determining step a user node</p>	<p>first user node.</p> <p>3. The method as defined in claim 2, wherein in the determining step, the random decision is made based on a weighting factor corresponding to the probability that the first user node will decide to send the response to the requesting user node.</p> <p>4. The method as defined in claim 1; wherein the forwarding step includes the sub-steps of: randomly selecting one of the user nodes to which the first user node is connected to be the second user node; and forwarding the response from the first user node to the second user node through a direct connection.</p> <p>5. The method as defined in claim 1, further comprising the step of repeating the steps of determining and forwarding until in the determining step a user node that received the response decides to send the response to the requesting user node.</p> <p>6. The method as defined in claim 1, wherein the step of sending the response to the requesting user node includes the sub-steps of: directly sending the response to a third user node of the network through a direct connection, the third user node having previously sent the resource request to the publish-subscribe server node for publication; and propagating the response from the third user node to the requesting user node.</p> <p>7. The method as defined in claim 1, wherein the step of sending the response to the requesting user node includes the sub-steps of: sending the response to a</p>
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that received the resource request decides to send the resource request to the publish-subscribe server node.

8. The method as defined in claim 1, further comprising the step of: sending the resource request to be published from a requesting user node, which desires the request resource, to the first user node through a direct connection.

9. A machine-readable medium encoded with a program for discovering resources in a network of user nodes, said program containing instructions for performing the steps of: receiving, at a first user node of the network from one of the user nodes through a direct connection, a resource request to be published; determining whether to send the resource request to a publish-subscribe server node or to send the resource request to another of the user nodes; forwarding the resource request from the first user node to a second user node of the network, when it is determined to send the resource request to another of the user nodes; and sending the resource request from the first user node to the publish-subscribe server node for publication to a plurality of the user nodes

third user node of the network via the publish-subscribe server node, the third user node having previously sent the resource request to the publish-subscribe server node for publication; and propagating the response from the third user node to the requesting user node.

11. The method as defined in claim 9, wherein the step of forwarding the resource request includes the sub-steps of: randomly selecting one of the user nodes to which the third user node is connected to be the fourth user node; and forwarding the resource request from the third user node to the fourth user node through a direct connection, and the step of forwarding the response includes the sub-steps of: randomly selecting one of the user nodes to which the first user node is connected to be the second user node; and forwarding the response from the first user node to the second user node through a direct connection.

13. A machine-readable medium encoded with a program for responding to a resource request from a requesting user node in a network of user nodes, said program containing instructions for performing the steps of: receiving, via publication from a publish-subscribe server node, the resource request at a first user node of the network; receiving, from one of the user nodes through a direct connection, a response to the resource request at the first user node of the network; determining whether to send the response to the requesting user node or to send the response to another of the user nodes; forwarding the response to a second user node of the network, when it is determined to send the response to another of the nodes; and sending the

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of the network, when it is determined to send the resource request to the publish-subscribe server node. . . .	response to the requesting user node, when it is determined to send the response to the requesting user node. . . .
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***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho et al. (U.S. Patent Number 6,021,443), hereinafter referred to as Bracho, in view of Jacobs et al. (U.S. Patent Number 6,732,237), hereinafter referred to as Jacobs, and further in view of de Vries et al. (U.S. Patent Number 5,819,032), hereinafter referred to as de Vries.

10. Regarding claim 1, Bracho disclosed a method for discovering resources in a network of user nodes (Title, Abstract, Figure 1), said method comprising the steps of: receiving a resource request to be published at a first user node of the network (column 4 lines 34-48, column 5 lines 27-51); determining whether to send the resource request to a publish-subscribe server node (column 15 lines 33-42); and sending the resource request to the publish-subscribe server node for publication to a plurality of the user nodes of the network, when it is determined to send the resource request to the publish-

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subscribe server node (Abstract, column 2 lines 19-25, column 15 lines 21-42, column 18 lines 1-11).

11. Bracho taught the invention substantially as claimed. However, Bracho did not expressly teach the steps of determining whether to send the resource request to a publish-subscribe server node *or to send the resource request to another of the user nodes and forwarding the resource request from the first user node to a second user node of the network, when it is determined to send the resource request to another of the user nodes.*

12. Bracho suggested exploration of art and/or provided a reason to modify the method of Bracho with additional steps such as forwarding the resource request to a second user node of the network, when it is determined to send the resource request to another of the user nodes (column 15 lines 21-42, column 18 lines 19-24).

13. Jacobs disclosed a method having the steps of determining whether to send the resource request to a publish-subscribe server node or to send the resource request to another of the user nodes (column 8 lines 46-51) and forwarding the resource request from the first user node to a second user node of the network, when it is determined to send the resource request to another of the user nodes (column 9 lines 37-51).

14. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Bracho with the teachings of Jacobs to include the step of forwarding the resource request to a second user node of the network, when it is determined not to send the resource request to the publish-subscriber server node in order to improve system performance (Jacobs, column 9 lines



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37-52) since if the burden on the server is too great to service the resource request (column 9 lines 53-62), the resource request would still be able to forward to the appropriate node (column 18 lines 1-11).

15. The combination of Bracho and Jacobs taught the invention substantially as claimed. However, the combination of Bracho and Jacobs did not expressly teach receiving, *at a first user node of the network from one of the user nodes through a direct connection*, a resource request to be published.

16. Bracho suggested exploration of art and/or provided a reason to modify the combined method of Bracho and Jacobs with additional features (column 18 lines 19-24).

17. de Vries disclosed an electronic magazine distributing method comprising receiving, at a first user node of the network from one of the user nodes through a direct connection, a resource request to be published (column 4 lines 28-46, column 5 lines 15-24, column 5 line 66-column 6 line 13, column 9 lines 5-14).

18. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combined method of Bracho and Jacobs with the teachings of de Vries to include the direct connection between the publisher and subscriber in order to communicate with each other directly without any intermediary in a timely and efficient manner (Bracho, column 2 lines 1-6).

19. Regarding claim 2, Jacobs disclosed a method wherein in the determining step, the determination of whether to send the resource request to the publish-subscribe

server node or to send the resource request to another of the user nodes is a random decision made by the first user node (column 7 lines 9-15, column 12 lines 39-57).

20. Regarding claim 3, Jacobs disclosed a method wherein in the determining step, the random decision is made based on a weighting factor corresponding to the probability that the first user node will decide to send the resource request to the publish-subscribe server node (column 7 lines 9-15, column 12 lines 39-57).

21. Regarding claim 4, Jacobs disclosed a method wherein the forwarding step includes the sub-steps of: randomly selecting one of the user nodes to which the first user node is connected to be the second user node (column 7 lines 9-15, column 12 lines 39-57); and forwarding the resource request from the first user node to the second user node through a direct connection (column 9 lines 37-51).

22. Regarding claim 5, Bracho disclosed a method further comprising the step of sending, via publication from the publish-subscribe service node, the resource request to at least some of the user nodes of the network (column 4 lines 34-48, column 5 lines 27-51).

23. Regarding claim 6, Bracho disclosed a method wherein in the step of sending via publication from the publish-subscribe server, the publish-subscribe server node sends the resource request to all of the user nodes of the network that are subscribed to one or more resource request channels (Abstract, column 4 lines 34-48, column 6 lines 4-9, column 12 lines 20-39).

24. Regarding claim 7, Jacobs disclosed a method further comprising the step of repeating the steps of determining and forwarding until in the determining step a user

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node that received the resource request decides to send the resource request to the publish-subscribe server node (column 9 lines 23-51).

25. Regarding claim 8, Bracho disclosed a method further comprising the step of: sending the resource request to be published from a requesting user node, which desires the request resource, to the first user node through a direct connection (column 4 lines 34-48, column 5 lines 27-51, column 6 lines 4-9, column 12 lines 20-39).

26. Regarding claims 9-16, the machine-readable medium encoded with a program for discovering resources in a network of user nodes corresponds directly to the method of claims 1-8, and thus these claims are rejected using the same rationale.

27. Regarding claims 17-20, the user node for use in a computer network of the type that includes a plurality of user nodes and at least one publish-subscribe server node corresponds directly to the method of claim 1-4, and thus these claims are rejected using the same rationale.

28. Since all the limitations of the claimed invention were disclosed by the combination of Bracho, Jacobs, and de Vries claims 1-20 are rejected.

### ***Response to Arguments***

29. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

30. As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious.

***Conclusion***

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MARC D. THOMPSON  
MARC THOMPSON  
PRIMARY EXAMINER

Tam T. Phan  
July 11, 2005

TP